

27 March 2006

James S. Dilday, Esq.  
Grayer & Dilday  
27 School St.  
Boston, MA 02108

Dear Mr. Dilday:

Terri Pechner-James was wrongfully terminated. As a result she has lost remuneration.

Based on the facts I obtained, on my assumptions, and on my calculations I am of the opinion to a reasonable degree of economic certainty that Ms. Pechner-James has lost the following value of her remuneration.

<b>TOTAL</b>	<b>1,490,063</b>
<b>PRESENT VALUE</b>	<b>1,040,604</b>
<b>BACK PAY</b>	<b>99,687</b>
<b>FRONT PAY</b>	<b>940,917</b>

Sincerely,

Richard A. Siegel, Ph.D.  
Economist

RAS/r

rate of national inflation. I also provided for an increase in real compensation of 1.1 percent annually.<sup>2</sup>

I ended my projection of Ms. Pechner-James' normal earnings at her age 65. From age 66 to the end of her normal life span, age 77.3<sup>3</sup> I made a projection of her normal retirement income, which I calculated to be 80 percent of her highest 3 years of income.

I adjusted Ms. Pechner-James's annual earnings by deducting 10 percent for her contribution to her retirement program. I also adjusted future earnings by a real increase of 1.1 percent each year to reflect normal increases in real earnings for all workers in the US.<sup>4</sup>

For normal fringe benefits I valued the City of Revere's health insurance contribution at 14 percent of normal earnings.<sup>5</sup>

## ALTERNATIVE REMUNERATION

Ms. Pechner-James has not worked since she left her job with the City of Revere. She received retroactive retirement benefits on 30 June 2004 of \$88,018. Her disability retirement income of \$32,339 was approved on 4 June 2004.

For 2005 to the end of Ms. Pechner-James's life span I used the City of Revere Retirement System calculation of \$32,339. This includes \$1,678 in dependent allowances. I provided dependent allowances until Ms. Pechner-James's child, Katelyn, will reach age 18 in 2020.

## CALCULATIONS

My calculation of Ms. Pechner-James's lost remuneration appears in Table 1 overleaf.

<sup>2</sup> US worker total compensation increased by a real average of 1.1 percent annually for the period 1995 to 2005. Real compensation is actual compensation with the effect of general price inflation removed.

<sup>3</sup> 2001 Life Table, US Public Health Service.

<sup>4</sup> US real, hourly wages increased by 1.4 percent annually for the period 1995 to 2003. See US Bureau of Labor Statistics, *Average hours and earnings of production or nonsupervisory workers* .....

<sup>5</sup> See Table 618. *Employer Costs for Employee Compensation Per Hour Worked: 2002. Statistical Abstract of the United States: 2003. Union Members scale.*



Table 1 contains several columns. The leftmost set forth the time period of my analysis and Ms. Pechner-James's age. She was 27 years of age when she was terminated from employment. She was born on 29 April 1973.

The column labeled "Normal Earnings" contains my projection of the wage portion of Ms. Pechner-James's normal remuneration. She was terminated on 13 March 2001. My projection of her normal earnings includes a 10 percent reduction for her contribution to her retirement program and a 1.1 percent increase to adjust for normal increases in real earnings. I also assumed Ms. Pechner-James's income would adjust to compensate for inflation until 2005. I assumed Ms. Pechner-James would normally have received 80 percent of her income as a pension.

The column labeled "Alternative Earnings" is based on Ms. Pechner-James's subsequent award of a disability pension.

The column labeled "Lost Earnings" is the difference between the two prior columns.

The column labeled "Lost Benefits" contains my projection of the fringe benefit component of Ms. Pechner-James's remuneration. It is 14 percent of normal earnings for all years.

The column labeled "Lost Remuneration" is the sum of the two prior columns. It is a projection of the remuneration Ms. Pechner-James may not receive.

#### **PRESENT VALUE**

The object of a calculation of lost remuneration is to make the plaintiff whole. To meet this criterion I made a calculation of the amount of money that, if it became available at present, and if it was invested, could duplicate Ms. Pechner-James's lost remuneration. This is present value.

A present value calculation requires decisions on the rate of return of investments Ms. Pechner-James may receive, and a date to begin the calculation. I used a 1.6 real rate of interest for my calculation. 1.6 percent is the average, real rate of interest on US Treasury 1-year notes for the period 1995 to 2005.<sup>6</sup> I used the date 1 January 2006 to discount future values to the present.<sup>7</sup>

<sup>6</sup> A real rate of interest is the recorded rate with the effect of inflation removed. Thus, if the actual rate of interest on a US Treasury 1-year note is 5 percent and inflation is 3 percent, the real rate of interest on that note is 2 percent.

<sup>7</sup> Mass Supreme Judicial Court, *Griffin v General Motors*, 1980.

*Draft*

**ANALYSIS OF LOST REMUNERATION**  
**TERRI PECHNER-JAMES**

Submitted to:

James S. Dilday, Esq.  
Grayer & Dilday  
27 School St.  
Boston, MA 02108

27 March 2006

James S. Dilday, Esq.  
Grayer & Dilday  
27 School St.  
Boston, MA 02108

Dear Mr. Dilday:

Sonia Fernandez was wrongfully terminated. As a result she has lost remuneration.

Based on the facts I obtained, on my assumptions, and on my calculations I am of the opinion Ms. Fernandez has lost the following value of her remuneration.

<b>TOTAL</b>	<b>1,351,755</b>
<b>PRESENT VALUE</b>	<b>1,009,227</b>
<b>BACK PAY</b>	<b>96,496</b>
<b>FRONT PAY</b>	<b>912,731</b>

Sincerely,

Richard A. Siegel, Ph.D.  
Economist

RAS/r

**ANALYSIS OF LOST REMUNERATION****SONIA FERNANDEZ****LOST REMUNERATION**

A person's remuneration is the value of the earnings and benefits he or she may expect to receive from work, given their education, training, work skills, knowledge, and effort. Lost remuneration is the value of remuneration a person may not receive as the result of an incident, such as an accident or a termination from work. Lost remuneration is a "net" concept because it deducts from **normal** remuneration a person's **alternative** remuneration, or remuneration from alternative work, he or she may expect to receive after the precipitating incident.

Though the concept of lost remuneration is easy to define, its measurement can be complicated. Questions arise as to the proper assumptions about future changes in remuneration, whether or not to deduct for taxes, and other issues.

**SONIA FERNANDEZ'S LOST REMUNERATION<sup>1</sup>**

Sonia Fernandez worked as a police officer for the City of Revere. She was terminated from employment on 13 March 2001 and has qualified for a disability pension.

**NORMAL REMUNERATION**

Ms. Fernandez was born on 27 October 1965. She joined the City of Revere Police Department in January 1994 and worked as a police officer.

Ms. Fernandez's annual income for years preceding her termination was as follows:

1998	51,377
1999	51,591
2000	49,166

I made a projection of Ms. Fernandez's normal income. I used her average 1998 – 2000 annual income, \$50,711 as a base of my projection. For the period 2001 to 2005 I assumed her income as a City of Revere police officer

<sup>1</sup> I obtained information on Sonia Fernandez's personal characteristics and income from her tax records and from Revere Retirement System records.

would have increased to match the rate of national inflation. I also provided for an increase in real compensation of 1.1 percent annually.<sup>2</sup>

I ended my projection of her normal earnings at her age 65. From age 66 to the end of her normal life span, age 78,<sup>3</sup> I made a projection of her normal retirement income, which I calculated to be 80 percent of her highest 3 years of income.

I adjusted Ms. Fernandez's annual earnings by deducting 10 percent for her contribution to her retirement program. I also adjusted future earnings by a real increase of 1.1 percent each year to reflect normal increases in real earnings for all workers in the US.<sup>4</sup>

For normal fringe benefits I valued the City of Revere's health insurance contribution at 14 percent of normal earnings.<sup>5</sup>

### ALTERNATIVE REMUNERATION

For my projection of Ms. Fernandez's alternative remuneration I used her income tax return figures. These recorded the following:

2001	24,205
2002	38,192
2003	50,544
2004	50,544 (assumed same as 2003)

For 2005 to the end of Ms. Fernandez's life span I used the City of Revere Retirement System calculation of \$35,448. I added \$611 until Ms. Fernandez's child, Angel Bobe, will reach age 18 in 2008.

### CALCULATIONS

My calculation of Ms. Fernandez's lost remuneration appears in Table 1 overleaf.

<sup>2</sup> US worker total compensation increased by a real average of 1.1 percent for the period 1995 to 2005. Real compensation is actual compensation with the effect of general price inflation removed.

<sup>3</sup> 2001 Life Table, US Public Health Service.

<sup>4</sup> US real, hourly wages increased by 1.4 percent annually for the period 1995 to 2003. See US Bureau of Labor Statistics, *Average hours and earnings of production or nonsupervisory workers .....*

<sup>5</sup> See Table 618. Employer Costs for Employee Compensation Per Hour Worked: 2002. *Statistical Abstract of the United States: 2003*. Union Members scale.

TABLE 1			ANALYSIS OF LOST REMUNERATION			SONIA FERNANDEZ		
YEAR	AGE	SIGNIFICANT EVENTS	NORMAL EARNINGS	ALTERNATIVE EARNINGS	LOST EARNINGS	LOST BENEFITS	LOST REMUNERATION	
2001	35	Left employment 19 March 2001.	45,640	24,206	21,435	6,390	27,824	
2002	36		46,827	24,206	22,622	6,558	29,177	
2003	37		48,372	50,544	(2,172)	6,772	4,800	
2004	38		49,833	50,544	(721)	6,975	6,254	
2005	39		52,065	36,561	15,504	7,289	22,793	
2006	40		52,586	36,561	16,025	7,362	23,387	
2007	41		53,112	36,561	16,551	7,436	23,886	
2008	42		53,643	36,010	17,632	7,510	25,142	
2009	43		54,179	35,986	18,193	7,585	25,778	
2010	44		54,721	35,986	18,735	7,661	26,396	
2011	45		55,266	35,986	19,282	7,738	27,020	
2012	46		55,821	35,986	19,835	7,815	27,650	
2013	47		56,379	35,986	20,393	7,893	28,286	
2014	48		56,943	35,986	20,957	7,972	28,929	
2015	49		57,512	35,986	21,526	8,062	28,578	
2016	50		58,087	35,986	22,101	8,132	30,233	
2017	51		58,668	35,986	22,882	8,214	30,866	
2018	52		59,255	35,986	23,269	8,296	31,595	
2019	53		59,847	35,986	23,861	8,379	32,240	
2020	54		60,446	35,986	24,460	8,462	32,922	
2021	55		61,050	35,986	25,064	8,547	33,611	
2022	56		61,661	35,986	25,675	8,633	34,307	
2023	57		62,277	35,986	26,291	8,719	35,010	
2024	58		62,900	35,986	26,914	8,806	35,720	
2025	59		63,529	35,986	27,543	8,894	36,437	
2026	60		64,164	35,986	28,176	8,983	37,152	
2027	61		64,806	35,986	28,820	9,073	37,863	
2028	62		65,454	35,986	29,468	9,164	38,632	
2029	63		66,109	35,986	30,123	9,256	39,378	
2030	64		66,770	35,986	30,784	9,346	40,132	
2031	65	Normally retire, end of year.	67,438	35,986	31,452	9,441	40,863	
2032	66		59,944	35,986	23,958	9,441	33,399	
2033	67		59,944	35,986	23,958	9,441	33,399	
2034	68		59,944	35,986	23,958	9,441	33,399	
2035	69		59,944	35,986	23,958	9,441	33,399	
2036	70		59,944	35,986	23,958	9,441	33,399	
2037	71		59,944	35,986	23,958	9,441	33,399	
2038	72		59,944	35,986	23,958	9,441	33,399	
2039	73		59,944	35,986	23,958	9,441	33,399	
2040	74		59,944	35,986	23,958	9,441	33,399	
2041	75		59,944	35,986	23,958	9,441	33,399	
2042	76		59,944	35,986	23,958	9,441	33,399	
2043	77		59,944	35,986	23,958	9,441	33,399	
2044	78	Normal end of life, age 78.	46,706	20,239	19,466	7,671	27,137	
TOTAL			2,985,383	1,562,940	975,443	372,312	1,361,755	
PRESENT VALUE			1,646,611	1,221,656	726,256	280,971	1,069,227	
BACK PAY							96,498	
FRONT PAY							812,731	
TABLE PREPARED BY APPLIED ECONOMICS, INC.								
2E								

Table 1 contains several columns. The leftmost set forth the time period of my analysis and Ms. Fernandez's age. She was 35 years of age when she was terminated from employment. She was born on 22 October 1965.

The column labeled "Normal Earnings" contains my projection of the wage portion of Ms. Fernandez's normal remuneration. She was terminated on 13 March 2001. My projection of her normal earnings includes a 10 percent reduction for her contribution to her retirement program and a 1.1 percent increase to adjust for normal increases in real earnings. I also assumed Ms. Fernandez's income would adjust to compensate for inflation until 2005. I assumed Ms. Fernandez would normally have received 80 percent of her income as a pension.

The column labeled "Alternative Earnings" is based on Ms. Fernandez's 2001 to 2004 earnings and her subsequent award of a disability pension.

The column labeled "Lost Earnings" is the difference between the two prior columns.

The column labeled "Lost Benefits" contains my projection of the fringe benefit component of Ms. Fernandez's remuneration. It is 14 percent of normal earnings for all years beyond 2004.

The column labeled "Lost Remuneration" is the sum of the two prior columns. It is a projection of the remuneration Ms. Fernandez may not receive.

#### PRESENT VALUE

The object of a calculation of lost remuneration is to make the plaintiff whole. To meet this criterion I made a calculation of the amount of money that, if it became available at present, and if it was invested, could duplicate Ms. Fernandez's lost remuneration. This is present value.

A present value calculation requires decisions on the rate of return of investments Ms. Fernandez may receive, and a date to begin the calculation. I used a 1.6 real rate of interest for my calculation. 1.6 percent is the average, real rate of interest on US Treasury 1-year notes for the period 1995 to 2005.<sup>6</sup> I used the date 1 January 2006 to discount future values to the present.<sup>7</sup>

<sup>6</sup> A real rate of interest is the recorded rate with the effect of inflation removed. Thus, if the actual rate of interest on a US Treasury 1-year note is 5 percent and inflation is 3 percent, the real rate of interest on that note is 2 percent.

<sup>7</sup> Mass Supreme Judicial Court, *Griffin v General Motors*, 1980.

A purchase of 1-year Treasury notes would provide Ms. Fernandez with the safest investment possible and so insure the appearance of money in the future when she could normally have expected it. US Treasury notes have an assured repayment.

### OPINION

A column sum and a column present value appear at the foot of each column in Table 1. The sum is the total of all column entries. The present value is an amount of money that, if invested, will produce the column entries each year.

My opinion of Ms. Fernandez's lost remuneration appears at the foot of the lost remuneration column, a total of \$1,351,755 and the present value of \$1,009,227. Ms. Fernandez's back pay loss is \$96,496. Her front pay loss is \$912,731.

### CONCLUSION

This concludes my report. My Statement of Qualifications follows as an appendix.

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COMMENTS:

*Please fact check.*



**ANALYSIS OF LOST REMUNERATION**

**SONIA FERNANDEZ**

Submitted to:

James S. Dilday, Esq.  
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27 School St.  
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